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John B. Yates, III GE Plastics			REDDICK,	REDDICK, MARIE L	
One Plastics A	venue		ART UNIT PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	- (, 1
	10/632,606	SATO, SHO	ی
Office Action Summary	Examiner	Art Unit	
	Judy M. Reddick		
The MAILING DATE of this communication		ith the correspondence addre	266
The MAILING DATE of this communication Period for Reply A SHORTENED STATUTORY PERIOD FOR RITHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by seany reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filled on Capping and Capping an	EPLY IS SET TO EXPIRE 3 MON. FR 1.136(a). In no event, however, may a reply within the statutory minimum of thirt eriod will apply and will expire SIX (6) MON statute, cause the application to become AB mailing date of this communication, even if the statute of	ONTH(S) FROM eply be timely filed by (30) days will be considered timely. THS from the mailing date of this common teacher (35 U.S.C. § 133). THE STATE OF TH	nunication,
5)☐ Claim(s) is/are allowed. 6)☒ Claim(s) <u>1 & 3-7</u> is/are rejected. 7)☐ Claim(s) is/are objected to. 8)☐ Claim(s) are subject to restriction are	nd/or election requirement.		
9) The specification is objected to by the Exam 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11) The oath or declaration is objected to by the	accepted or b) objected to be the drawing(s) be held in abeyand rection is required if the drawing(s)	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1	.121(d). 152.
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority docum 2. ☐ Certified copies of the priority docum 3. ☐ Copies of the certified copies of the priority docum application from the International Bur * See the attached detailed Office action for a	nents have been received. The sents have been received in Appriority documents have been reau (PCT Rule 17.2(a)).	pplication No eceived in this National Stag	је
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date	Paper No(s)/	mmary (PTO-413) Mail Date ormal Patent Application (PTO-152))

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 3-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As far as the Examiner can tell, no express support can be found for the newly added limitation "and (E) thermoplastic elastomer in an amount of 10 to 200 parts by weight to 100 parts by weight wherein the thermoplastic elastomer has a molecular weight distribution below 10 and the composition has a tensile strength greater than or equal to 34 and a tensile elongation greater than 5 when determined according to ASTM D638" per claim 1 and this, as such, without iron-clad guidelines as to where support might be found, engenders a New Matter situation. On page 12, paragraph 0040, it specifically states that the molecular weight distribution(Mw/Mn) is below 10 for a hydrogenated styrene block copolymer having a weight average molecular weight(Mw) in the range of 5,000 to 1,000,000. As to the tensile strength and tensile elongation, Table 1 provides, for a specific composition, a Tensile strength of 68(Run 1), 34(Run 2) and 35(Run 3) and a Tensile elongation of 5(Run 1), 74(Run 2) and 17(Run 3).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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- 4. Claims 1 and 3-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- A) The recited "and (E) thermoplastic elastomer in an amount of 10 to 200 parts by weight to 100 parts by weight" per claim 1 constitutes indefinite subject matter as per it not being readily ascertainable as to the exact entity that the elastomer content is being based on, i.e., "resin composition" or else.
- B) The recited "The resin composition of Claim 2, the wherein" per claim 5 constitutes indefinite subject matter as per a) the improper dependency from a cancelled claim and b) "the wherein" engenders a grammatical deficiency.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1 & 3-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamasaki et al(U.S. 5,109,068, equivalent to EP 356,068).

Yamasaki et al teach a styrene-based polymer composition, suitable for materials such as the exterior trim parts of an automobile, engine compartment parts, machine parts,

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electric and electronic parts, domestic kitchenware, etc. which comprises (A) 10 to 98% by weight of a styrene-based polymer having syndiotactic configuration with a racemic pentad of 30% or more,(B) 90 to 2% by weight of polyphenylene ether such as poly(2,6dimethyl-1,4-phenylene)ether having an intrinsic viscosity of 0.28 dl/g or more at 30 degree C in chloroform,(C) 3-40 parts by weight, based on 100 parts by weight of components (A) and (B) of a flame retarder which includes phosphorous-based flame retarders such as tricresyl phosphate, triethyl phosphate, etc., (D) 1 to 15 parts by weight, based on 100 parts by weight of components (A) and (B) of a flame-retardant aid, (E) 5 to 85 parts by weight, based on 100 parts by weight of components (A) and (B) of a rubber-like elastomer and/or inorganic filler wherein the rubber-like elastomer includes a partially or fully hydrogenated styrene-butadiene block copolymer, a partially or fully hydrogenated styrene-isoprene block copolymer, etc. and other conventional additives such as antioxidants, lubricants, etc. See the Abstract, col. 1, lines 8-16, col. 2, lines 20-68, col. 3, lines 46-68, col. 4, lines 1-65 and especially lines 4-5 & 62-65, col. 5, lines 1-68, col. 6, lines 18-68, col. 7, lines 62-65, and TABLES 3 and 4 of Yamasaki et al. Yamasaki et al therefore anticipate the instantly claimed invention with the understanding that the resin composition of Yamasaki et al overlaps in scope with the resin composition of the instant claims. The use of the resin composition of Yamasaki et al as a wire and cable covering would be expected since the resin composition of Yamasaki et al is essentially the same as and made in essentially the same manner as the claimed resin composition. It is well settled that when a claimed product reasonably appears to be substantially the same as a product disclosed in the prior art, the burden of proof is on the applicants to prove that the prior art product does not inherently or necessarily possess the characteristics attributed to the claimed product. See In re Spada 15 USPQ 2d 1655 (CAFC 1990). "The absence of a disclosure relating to function does not defeat a finding of anticipation. It is well settled that the recitation of a new intended use for an old

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product does not make a claim to that old product". In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431(Fed Cir 1997).

Further, the molecular weight distribution of the (E) thermoplastic elastomer and tensile strength of the composition, as claimed, may very well be met by the rubber-like elastomer and composition, respectively, of Yamasaki et al (col. 5, lines 51-68 to col. 6, lines 1-17 and at least Run 6), in the absence of the USPTO to have at its disposal the tools nor facilities to make physical determinations of this sort. In any event, the use of any commercially available rubber-like elastomer in lieu of the rubber-like elastomer of Yamasaki et al would have been obvious to one having ordinary skill in the art and with a reasonable expectation of equivalent results. Moreover, since the composition of Yamasaki et al is essentially the same as the claimed composition, it would be expected that the tensile strength, as claimed, would be met.

It has been held that where applicants claims a composition in terms of function, property of characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristic is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of In re Best, 195 USPQ 430, 433(CCPA 1977); In re Fitzgerald et al, 205 USPQ 594.

As to the "consisting essentially of" clause, such only precludes those components that would materially alter the basic and novel characteristics of applicant's composition (Exparte Davis, 80 USPQ 448, PTO Bd. App. 1948 and In re Janakirama-Rao, 317 F 2d 951, 137 USPQ 893, (CCPA 1963)).

Even if it turns out that the claims are not anticipated by Yamasaki et al, it would have been obvious to the skilled artisan to extrapolate, from the disclosure of Yamasaki et al,

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the defined resin composition, as claimed, as per such having been within the purview of the general disclosure of Yamasaki et al and with a reasonable expectation of success.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 10. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamasaki et al(U.S. 5,109,068), alone, or further in combination with Cizek(U.S. 3,383,435).

Yamasaki et al is relied on for all that it teaches as set forth in the rejection supra per paragraph no. 6 as applied to claims 1-7. Further, the myriad of suitable uses for the resin composition cited per col. 1, lines 8-16 which include machine parts, electric and electronic parts is generic to and necessary implies that any use for the disclosed resin

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composition, including the claimed "wire covering" (claim 6) and "cable covering" (claim 7), would have been operable within the scope of patentees invention and with a reasonable expectation of success. Alternatively, Cizek teaches the use of thermoplastic compositions comprising a polyphenylene ether and a styrene resin, similar to the resin composition of Yamasaki et al, to prepare molded, calendared or extruded articles, films, tapes, etc. to be used in a broad array of applications which include electrical applications such as in cable terminals, wire tapes, etc. (see, the paragraph bridging cols 8-9 of Cizek). Therefore, it would have been obvious to one having ordinary skill in the art to use the resin composition of Yamasaki et al for wire coverings and cable coverings as taught by Cizek and with a reasonable expectation of success.

Claim Rejections - 35 USC § 102

11. Claims 1 & 3-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Funayama et al(U.S. 5,391,611).

Funayama et al teach a styrenic resin composition, suitable for general construction materials, electric and electronic parts, car parts, raw materials for film, fiber, sheet, etc., comprising (A) a styrenic polymer having high degree of syndiotactic configuration and (B) a rubbery polymer having a product of weight-average molecular weight and styrenic monomer unit content (Cst) - (Mw X Cst) being at least 30,000. More specifically, Funayama et al teach a styrenic resin composition comprising 50 to 98% by weight of (A) a styrenic polymer having high degree of syndiotactic configuration and 50 to 2% by weight of (B) a rubbery polymer having a product of weight-average molecular weight and styrenic monomer unit content of at least 30,000 wherein, said rubbery polymer includes styrene-butadiene block copolymer rubber; a styrenic resin composition which comprises 100 parts by weight of the mixture of 50 to 98% by weight of the aforesaid component (A) and 50 to 2% by weight of the aforesaid component (B), 0.1 to 50 parts by weight of (C) a polyphenylene ether having a polar group wherein said polyphenylene

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ether includes those governed by an intrinsic viscosity of 0.45 in chloroform at 25 degrees C and includes poly(2,6-dimethyl-1,4-phenylene ether(See at least preparation Runs 2 and 3)and 1 to 350 parts by weight of (D) a filler surface-treated with a coupling agent and a styrenic resin composition which comprises 100 parts by weight of the mixture of 50 to 98 % by weight of the aforesaid component (A) and 50 to 2 % by weight of the aforesaid component (B), 0.1 to 50 parts by weight of the aforesaid component (C), 1 to 350 parts by weight of the aforesaid component (D), 3 to 60 parts by weight of (E) a flame retardant which includes tricresyl phosphate, triethyl phosphate, etc., 1 to 15 parts by weight of (F) a flame retardant aid and other conventional additives such as stabilizers, antioxidants, lubricants, other thermoplastic resins such as unmodified polyphenylene ether etc. See the Abstract, col. 2, lines 9-41, col. 3, lines 25-68 to col. 4, lines 1-3, col. 4, lines 56-65, col. 6, lines 43-68, col. 8, lines 30-50, col. 9, lines 6-9 and 15-57, col. 12, lines 22-39 & 57-60, the Runs and the claims of Funayama et al. Funayama et al therefore anticipate the instantly claimed invention with the understanding that the styrenic resin composition of Funayama et al overlaps in scope with the instantly claimed resin composition. The use of the resin composition of Funayama et al et al as a wire and cable covering would be expected since the resin composition of Funayama et al is essentially the same as and made in essentially the same manner as the claimed resin composition. It is well settled that when a claimed product reasonably appears to be substantially the same as a product disclosed in the prior art, the burden of proof is on the applicants to prove that the prior art product does not inherently or necessarily possess the characteristics attributed to the claimed product. See In re Spada 15 USPQ 2d 1655 (CAFC 1990). "The absence of a disclosure relating to function does not defeat a finding of anticipation. It is well settled that the recitation of a new intended use for an old product does not make a claim to that old product". In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431(Fed Cir 1997).

Further, the molecular weight distribution of the (E) thermoplastic elastomer and tensile strength of the composition, as claimed, may very well be met by the rubbery polymer and composition, respectively, of Funayama et al (col. 3, lines 25-53 and Runs 1-16), in the absence of the USPTO to have at its disposal the tools nor facilities to make physical determinations of this sort. In any event, the use of any commercially available rubbery polymer in lieu of the rubbery polymer of Funayama et al would have been obvious to one having ordinary skill in the art and with a reasonable expectation of equivalent results. Furthermore, since the composition of Funayama et al is essentially the same as the claimed composition, it would be expected that the tensile strength, as claimed, would be met.

It has been held that where applicants claims a composition in terms of function, property of characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristic is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of In re Best, 195 USPQ 430, 433(CCPA 1977); In re Fitzgerald et al, 205 USPQ 594.

As to the "consisting essentially of" clause, such only precludes those components that would materially alter the basic and novel characteristics of applicant's composition (Exparte Davis, 80 USPQ 448, PTO Bd. App. 1948 and In re Janakirama-Rao, 317 F 2d 951, 137 USPQ 893, (CCPA 1963)).

Even if it turns out that the claims are not anticipated by Funayama et al, it would have been obvious to the skilled artisan to extrapolate, from the disclosure of Funayama et al, the defined resin composition, as claimed, as per such having been within the purview of the general disclosure of Funayama et al and with a reasonable expectation of success.

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12. Claims 6 & 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funayama et al(U.S. 5,391,611), alone, or further in combination with Cizek(U.S. 3,383,435).

Funayama et al is relied on for all that it teaches as set forth in the rejection supra as applied to claims 1-7. Further, the myriad of suitable uses for the resin composition cited per col. 12, lines 57-60 which includes general construction materials, electric and electronic parts, etc. is generic to and necessary implies that any use for the disclosed resin composition, including the claimed "wire covering" (claim 6) and "cable covering" (claim 7), would have been operable within the scope of patentees invention and with a reasonable expectation of success. Alternatively, Cizek teaches the use of thermoplastic compositions comprising a polyphenylene ether and a styrene resin, similar to the resin composition of Funayama et al, to prepare molded, calendared or extruded articles, films, tapes, etc. to be used in a broad array of applications which include electrical applications such as in cable terminals, wire tapes, etc. (see, the paragraph bridging cols 8-9 of Cizek). Therefore, it would have been obvious to one having ordinary skill in the art to use the resin composition of Funayama et al for wire coverings and cable coverings as taught by Cizek and with a reasonable expectation of success.

Response to Arguments

- 13. Applicant's arguments filed 06/09/04 have been fully considered but they are not persuasive.
- a) Relative to Yamasaki et al---The crux of Counsel's arguments appears to hinge on the silence of Patentee with regard to both the tensile strength of the composition and the molecular weight distribution of the rubber-like elastomer. To this end, Counsel has not demonstrated on this record that the tensile strength and molecular weight distribution of the composition and rubber-like elastomer, respectively, do not meet the claimed limitations. Mere Counsel's arguments unsupported by factual evidence are given little weight. In re Lindner(173 USPQ 356).

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diffusing this issue.

b) Relative to Yamasaki et al w/Cizek---The crux of Counsel's arguments appears to hinge on Cizek teaches a composition of polyphenylene ether and atactic polystyrene and does not teach syndiotactic polystyrene and that an expectation of success for such a composition cannot be based on a composition comprising atactic polystyrene. To this end, it is urged and maintained that the instantly claimed invention is deemed obvious over Yamasaki et al in combination with Cizek as per reasons clearly stated in paragraph – supra. Cizek is provided as evidence that similar polyphenylene ether/styrene resin blend compositions are disclosed as having utilities equivalent to the utilities disclosed for similar polyphenylene ether/styrene resin blend compositions per Yamasaki et al and therefore, the use of the blend compositions of Yamasaki et al as a wire covering and a cable covering would have been obvious to the skilled artisan and with a reasonable expectation of success. There is nothing iron-clad on this record

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c) Relative to Funayama et al---The crux of Counsel's arguments appear to hinge on the silence of Patentee with regard to both the tensile strength of the composition and the molecular weight distribution of the rubbery polymer. To this end, Counsel has not demonstrated on this record that the tensile strength and molecular weight distribution of the composition and rubbery polymer, respectively, do not meet the claimed limitations. Mere Counsel's arguments unsupported by factual evidence are given little weight. In re Lindner(173 USPQ 356).

As to the "consisting essentially of" clause, if Counsel believes that the clause precludes the "filler" component of Funayama et al, then Counsel has the burden of showing that the introduction of the filler component of Funayama et al does, in fact, alter the basic and novel characteristics of applicant's composition(In re DeLarjarte, 337 F 2d 870, 143 USPQ 256 (CCPA 1964)). Mere Counsel's arguments unsupported by factual evidence are given little weight(In re Lindner, 173 USPQ 356).

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d) Relative to Funayama et al w/Cizek---The crux of Counsel's arguments appears to hinge on Cizek teaches a composition of polyphenylene ether and atactic polystyrene and does not teach syndiotactic polystyrene and that an expectation of success for such a composition cannot be based on a composition comprising atactic polystyrene. To this end, it is urged and maintained that the instantly claimed invention is deemed obvious over Funayama et al in combination with Cizek as per reasons clearly stated in paragraph – supra. Cizek is provided as evidence that similar polyphenylene ether/styrene resin blend compositions are disclosed as having utilities equivalent to the utilities disclosed for similar polyphenylene ether/styrene resin blend compositions per Funayama et al and therefore, the use of the blend compositions of Funayama et al as a wire covering and a cable covering would have been obvious to the skilled artisan and with a reasonable expectation of success. There is nothing iron-clad on this record diffusing this issue.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571)272-1110. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Judy M. Reddick Judy M. Reddick Primary Examiner Art Unit 1713

JMR grad 08/17/04